| 13-04   | ISS             |   | PLE AREA (for additional cross-references)   |  |  |  |  |  |  |  |  |  |  |  |  |
|---------|-----------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|
| γ ·     |                 | ISSU                                    | JING CLASSIFICATION                          |  |  |  |  |  |  |  |  |  |  |  |  |
| ORIO    | GINAL           | CROSS REFERENCE(S)                      |  |  |  |  |  |  |  |  |  |  |  |  |  |
| CLASS   | SUBCLASS        | CLASS SUBCLASS (ONE SUBCLASS PER BLOCK) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 327     | <sub>ե</sub> ևԿ |   |  |  |  |  |  |  |  |  |  |  |  |  |  |
|         | IATIONAL        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |
| CLASSII | FICATION        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ¥014    | 23102           | _                                       |  |  |  |  |  |  |  |  |  |  |  |  |  |
| HOIL    | 23 148          |   |  |  |  |  |  |  |  |  |  |  |  |  |  |
|         | . 1             |   |  |  |  |  |  |  |  |  |  |  |  |  |  |
|         | 1               |   |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ,       | 1               |   | ∧ Continued on Issue Slip Inside File Jacket |  |  |  |  |  |  |  |  |  |  |  |  |
|         |                 |   | INDEX OF CLAIMS                              |  |  |  |  |  |  |  |  |  |  |  |  |

|               | '          |          |             |                                 |  |                                     |          |               |              |          |          |          |          |          |          |  | OF   | CL       |          |                |  |          |          |          |             |                    |          |          |               |           |                    |           |          |
|---------------|------------|----------|-------------|---------------------------------|--|-------------------------------------|----------|---------------|--------------|----------|----------|----------|----------|----------|----------|--|--|----------|----------|----------------|--|----------|----------|----------|-------------|--------------------|----------|----------|---------------|-----------|--------------------|-----------|----------|
|               |            |          |             | Rejected - (Through numeral) Ca |  |                                     |          |               |              |          |          |          |          |          |          |  |  |          |          |                | A Appeal   |          |          |          |             |                    |          |          |               |           |                    |           |          |
|               |            |          | <del></del> | Allowed +                       |  |                                     |          |               |              | Re       |          |          |          |          |          | ••••   |  | n        |          |                | O Objected   |          |          |          |             |                    |          |          | <del></del> - |           |                    |           |          |
| Ì             | Cla        | um       | Ь           | 13                              | т  | Date                                |          |               |              | Cla      | um_      | Ob       | L 7.     | 1        | _        | Date   |  |          |          | $\blacksquare$ |  | aim      |          | -        |             | ᆛ                  | ate      |          | $\overline{}$ | _         | Н                  |           |          |
|               |            | -        | 1           | 12                              | 1  | l                                   |          |               |              |          | 1        |          | 豆        | "        | 10       | 1  |  |          |          |                |  |          |          | <u> </u> |             |                    | - 1      | 1        |               |           |                    |           | 1 1      |
| Ì             | æ          | Original | U           | 12                              |  | l                                   |          |               |              |          |          | 78       | Orlginal | 24       |          |  |  | 1        |          |                |  |          | 70       | Original | - 1         |                    | ı        |          |               |           |                    |           | 1 1      |
| 1             | Final      | ā.       | 8           | ħα                              | 1  | Į                                   |          |               |              |          |          | Final    | ō        | 3        | 'nυ      | 1  |  |          |          | }              |  |          | Final    | ō        | 1           | ı                  | -        | 1        |               |           |                    | H         | H        |
|               | - 4        |          |             | -                               | 1-   | ⊢                                   | -        |               | <u> </u>     | Н        | Н        | <u> </u> |          | 0        | -        | ⊢  | ├-   | ⊢        | H        | ⊢              | ⊢  | $\vdash$ | $\vdash$ | 101      | $\dashv$    | +                  | ┥        | -        | $\dashv$      |           |                    |           | Н        |
|               | 1          | 1.       | 17          | Έ                               | ┞-   | _                                   | <b>!</b> | <u> </u>      | <u> </u>     |          | Щ        | 51       | 51       | 7        | 7        | <del> </del>                                     | ļ  | <u> </u> | <u> </u> | ┡              | Ь.   | Н        | - ⊢      |          | $\dashv$    | 4                  |          |          |               | _         | $\dashv$           | ш         | Н        |
|               | 2          | 2        | Ц           | Ц                               | ┖  |                                     | $\perp$  | L.,           |              |          | Ш        | 52       | 52       | Щ        | L        | L  | _  | <u></u>  | Щ        | _              | <u> </u>   | Щ        | $\perp$  | 102      | _           | 4                  | _        | _        |               |           | Ш                  | Щ         | Ш        |
|               | 3          | 3        | Ш           | Ш                               |  | L.                                  |          |               |              |          | Ш        | 55       | 53       | Ц.       | Ш        |  |  | L        |          |                |  | Ш        | ᆫ        | 103      |             | ┙                  |          | _        |               |           | $\Box$             |           | ш        |
|               | ų          | 4        | П           |                                 |  |                                     |          |               |              |          |          | 54       | 54       |          |          |  |  |          |          | <u> </u>       | L  | Ш        | L        | 104      |             | $\Box$             |          |          |               |           |                    |           |          |
|               | 5          | 5        | П           | П                               | Г  | Γ                                   |          |               |              |          | П        | 53       | 55       | П        | П        | Г  |  | Г        |          |                |  | П        | Г        | 105      | $\neg \top$ | П                  |          |          | П             |           | П                  |           | П        |
|               | b          | 6        | П           | 1                               |  | 1                                   |          |               | Г            |          | П        | \$76     | 56       | П        | П        | П  | Т  |          |          | Г              | П  | П        |          | 106      |             | 丁                  | ヿ        | ヿ        | $\neg$        | П         | П                  | П         | П        |
|               | 'n         | 7        | Ħ           | $^{\dagger}$                    | T  | Т                                   | H        | Т             | _            |          | П        | 57       | 57       | 1        | 1        | _  | ┢  | -        | П        |                |  |          |          | 107      |             | 7                  | †        | _        | $\neg$        |           | $\neg$             | $\Box$    | П        |
| .             | el m       | 8        | 1           | H                               | <del> </del>                                     | 1                                   | $\vdash$ |               |              |          | Н        | 58       | 58       | Н        | +        | $\vdash$   | <u> </u>   | $\vdash$ | ┢        |                | ┢  | $\vdash$ | $\vdash$ | 108      | 一十          | 7                  | -1       | -1       |               | -         | -1                 | $\neg$    | Н        |
| 1             | 1          | 9        | H           | ┰                               | -  | -                                   | 1-       |               | H            | $\vdash$ | Н        | 59       | 59       | +        | H        | -  | -  | -        |          | -              | -  | H        | -        | 109      | -           | -+                 | {        |          | ╌┤            | $\dashv$  | $\dashv$           | $\dashv$  | Н        |
| 1             | +          | 10       | ₽           | Н                               | ├  | -                                   | ╌        | -             | -            | Н        | Н        | 60       | 60       | 4        | ╁        | -  | ⊢  | -        | -        | -              | -  | H        | -        | 110      |             | $\dashv$           | ┥        | $\dashv$ | $\dashv$      | $\dashv$  | $\dashv$           | $\dashv$  | Н        |
| -             | 10         |          | ₩           | +                               | ┝  | -                                   | Н        |               | $\vdash$     | Н        | Н        | 00       |          | 2        | ٠.       | -  | -  |          |          | -              | ⊢  |          | -        | 1 1      | -           | $\dashv$           | $\dashv$ | $\dashv$ | $\dashv$      | 4         | $\dashv$           | -         | Н        |
| İ             | !!         | 11       | H           | H                               | -  | -                                   | Н        | ļ             | <b>-</b>     | Ь.,      | Н        | -        | 61       | Щ        | <u> </u> | <u> </u>   | $\vdash$   | $\vdash$ | <u> </u> | <u> </u>       | ⊢  | Н        | $\vdash$ | 111      | -           | 4                  | _        | _        | 4             | _         | 4                  | -         | Н        |
|               | 12         | 12       | Н           | 1                               | ┞-   | <b>L</b>                            | $\sqcup$ | Ь             | ļ,           | Щ        | Ш        | <b> </b> | 62       | _        | L        | _  | <b>L</b>   | <u> </u> | $\vdash$ | <u> </u>       | <u> </u>   | Ш        | <u> </u> | 112      | _           | 4                  | _        |          |               |           | ᆈ                  | $\square$ | Ш        |
| `             | 13         | 13       | Щ           | Щ                               | ┖  | $ldsymbol{ldsymbol{ldsymbol{eta}}}$ |          |               |              | Ц.       | Ш        | <u> </u> | 63       | L        | L        | $oxed{oxed}$                                     | L.   | <u> </u> | Ш        | L_             | Щ  | Ш        | $\vdash$ | 113      |             | ┙                  |          |          |               |           | $oldsymbol{\perp}$ |           | Ш        |
|               | 14         | 14       | Ш           | L                               | L  | L                                   |          |               | <u>L</u>     |          | Ш        | L        | 64       |          | L        | L  | L  |          | L        | L              |  |          | L        | 114      | [           |                    |          | ]        |               |           |                    |           | Ш        |
|               | 15         | 15       | П           | Ш                               |  |                                     |          |               |              | L        |          |          | 65       |          | L        | L  | L  |          |          |                |  |          |          | 115      |             |                    | T        |          | _7            |           |                    |           |          |
| j             | ۱þ         | 16       | Π           | П                               |  | Π                                   | П        |               |              |          | П        |          | 66       |          | Γ        |  |  |          |          |                |  |          |          | 116      | $\neg$      | $\exists$          | ٦        | T        | $\neg$        |           |                    | П         | П        |
|               | 17         | 17       | П           | 1                               | Π  | Γ                                   | П        | П             |              |          |          |          | 67       |          |          | Г  | Г  |          |          |                |  |          |          | 117      | 7           | _                  | 7        | $\neg$   | ┪             | $\Box$    | $\neg$             |           | $\sqcap$ |
|               | 18         | 18       | 1           | 1                               | T  |                                     |          | П             |              |          | Н        |          | 68       | П        |          |  |  |          |          | _              |  |          |          | 118      | _           | ┱                  | 7        | 7        | _             | $\neg$    | $\neg$             | $\neg$    | П        |
|               | ig         | 19       | ╫╴          | ╫                               | <del> </del>                                     | 一                                   | $\vdash$ |               |              | -        | Н        | -        | 69       | H        | -        | -  | $\vdash$   |          |          | $\vdash$       | $\vdash$   | $\vdash$ | -        | 119      | _           | $\dashv$           | $\dashv$ | -        | ┪             | -         | $\dashv$           | $\dashv$  | Н        |
|               | 70         | 20       | H           | +                               | ┢╾   | ┢╾                                  | $\vdash$ | Н             | Н            | -        | Н        | -        | 70       | -        | -        | -  | -  |          | -        | _              | ┝  | Н        | $\vdash$ | 120      | -+          | -+                 | - 1      |          |               | $\dashv$  | $\dashv$           |           | $\dashv$ |
|               |            | 21       | ₩           | H-                              | ┼─   | ⊢                                   | $\vdash$ | -             | Н            |          | $\dashv$ | -        | 71       |          |          | -  | ⊢  | H        | -        | _              | ⊢  | Н        | $\vdash$ | 121      | -+          | +                  | -        | $\dashv$ | $\dashv$      |           | $\dashv$           | $\dashv$  | Н        |
|               | ય          |          | Н           | ₩-                              | ├  | ├-                                  | $\vdash$ | $\vdash$      |              | -        | $\dashv$ | $\vdash$ |          | Н        |          | ├  | <u> </u>   | _        | H        | <u> </u>       |  | Н        | -        | 1 1      | $\dashv$    | -                  | -        | -        | -             | $\dashv$  | -+                 | 4         | Н        |
| y             | n          | 22       | Н           | Щ.                              | <u> </u>   | <b>├</b>                            | $\vdash$ | Ш             | ш            |          | ш        | -        | 72       | _        | _        | <u> </u>   | <u> </u>   |          | Ш        | _              | _  | Щ        | <u> </u> | 122      | 4           | 4                  | _        | _        |               |           | _                  | $\dashv$  | Н        |
| 2             | V          | 23       | Ц.          | Щ.                              | <u> </u>   | <u> </u>                            | 1        |               | Щ            |          | _        | L.       | 73       |          |          | L  | _  |          |          | L              |  | Ш        | $\vdash$ | 123      | _           | 4                  |          | _        | _             | $\Box$    | $\dashv$           |           | Ы        |
| 7             | 24         | 24       | Ц.          | Ц.                              | L  | _                                   | Ш        |               |              |          |          | $\perp$  | 74       |          |          | <u> </u>   |  |          |          |                | L  | Ш        | $\perp$  | 124      |             |                    | _        | _        |               |           |                    |           | Ш        |
| M             | X          | 25       | Ш           | Ц                               | L  | <u>L</u>                            | Ц        |               | Ш            |          |          |          | 75       |          | _        |  | _  |          |          |                |  | Ш        | L        | 125      |             | $\perp$            |          |          | _             |           | $\Box$             | Ш         | Ш        |
|               | منتا       | 26       | Ш           |                                 |  |                                     |          |               |              |          |          |          | 76       |          | _        |  | L  |          |          |                |  |          |          | 126      |             |                    |          |          |               |           |                    |           |          |
| - [           | īη         | 27       | Π           | Π                               | Π  |                                     |          |               |              |          |          |          | 77       | П        |          |  |  |          |          |                |  |          | Г        | 127      | $\neg$      | П                  | П        | П        | П             |           | П                  |           | П        |
| - 1           | 28         | 28       | П           | Π                               | П  | Г                                   |          |               |              |          | $\neg$   |          | 78       |          |          |  |  |          |          |                |  |          |          | 128      |             |                    |          |          | $\neg$        |           | $\neg$             |           | П        |
| - 1           | 29         | 29       | П           | $\top$                          | <del>                                     </del> | Г                                   | $\Box$   |               |              |          |          |          | 79       |          |          |  | _  |          |          |                |  | П        |          | 129      | 寸           | 7                  |          |          | _             |           | $\dashv$           |           | П        |
|               | 33         | 30       | Н           | П                               | 1  | 1                                   |          |               |              |          | $\neg$   |          | 80       |          | -        | _  | $\vdash$   | _        |          | _              | ┰  | П        |          | 130      | 一           | 7                  | _        | ヿ        | ┪             |           | $\dashv$           | $\dashv$  | П        |
| M             | 31         | 31       | М           | 1                               | ┢  | ┢                                   | $\vdash$ | -             | -            | Н        | $\dashv$ | -        | 81       | $\neg$   | _        | -  | $\vdash$   | Н        | Н        | $\vdash$       |  | Н        | $\vdash$ | 131      | -           | +                  | -        | -        | _             | $\dashv$  | $\dashv$           | _         | _        |
| Ÿ,            |            | 32       | H           | +                               | +-   | $\vdash$                            | Н        | -             | $\vdash$     | Н        | $\dashv$ | $\vdash$ | 82       | -        | -        | -  | <del>                                     </del> | $\vdash$ | Н        | _              | $\vdash$   | $\vdash$ | $\vdash$ | 132      | $\dashv$    | $\dashv$           | +        | $\dashv$ |               | $\dashv$  | -+                 | $\dashv$  | Н        |
| Ķi            | -3\<br>-3\ | 33       | Н           | +                               | -  | -                                   | H        | Н             | -            | Н        | $\vdash$ | $\vdash$ | 83       | -        |          | -  | $\vdash$   | $\vdash$ | Н        | -              | $\vdash \vdash$  | H        | $\vdash$ | 133      | -+          | $\dashv$           | $\dashv$ | $\dashv$ | $\dashv$      | $\dashv$  | $\dashv$           | $\dashv$  | $\vdash$ |
| الي           |            | 34       | ۲           | Н                               | ⊢  | ┢                                   | $\vdash$ | Н             | Н            | -        | Н        | $\vdash$ | 84       |          | -        | -  | -  | -        | Н        | -              | -  | $\vdash$ | $\vdash$ | 134      | +           | $\dashv$           | -        | 긤        | $\dashv$      | -         | -                  | $\dashv$  | Н        |
| Š             | <u> 34</u> | 35       | H           | ₩                               | ⊢  | ⊢                                   | Н        | Н             | $\vdash$     | <u> </u> | Н        | <u> </u> | 85       |          | <u> </u> | <del> </del>                                     | $\vdash$   | <u> </u> | -        | <u> </u>       | -  | H        |          | 135      | +           | $\dashv$           | -        |          |               | _         | -                  | $\dashv$  | Н        |
| J             | 35         | _        | ${\it H}$   | 1                               | ╂  |                                     | Н        | $\vdash$      | <u> </u>     | Щ        | Н        | <u> </u> |          | ш        | _        | <del> </del>                                     | ⊢-   | $\vdash$ | Щ        | Ь.             | $\vdash$   | $\vdash$ | <u></u>  |          | 4           | $\dashv$           | -        | _        | -4            |           | $\dashv$           | $\dashv$  | Н        |
| لد            | 3,5        | 36       | μ.          | 1                               | ┺  | <b>└</b>                            | Ш        | Ш             | L.,          | <u> </u> | Ш        | _        | 86       | _        |          | <u> </u>   | L  |          | ш        |                | L.   | Ш        | $\vdash$ | 136      | _           | _                  | _        |          | _             | Ш         | $\dashv$           | ┙         | Ш        |
| O             | 37         | 37       | Ц.          | $\sqcup$                        | ╙  | <u> </u>                            | Ш        |               | Щ            | Ш        | Ш        | -        | 87       |          | _        | L_   | L.   |          | ш        | L              | Щ  | Ш        | $\vdash$ | 137      | _           | 4                  | 4        |          | _             |           | $\perp$            |           | Ш        |
| ᅦ             | 38         | 38       | Щ           | Ш                               | 丄  | <u> </u>                            | Ш        |               | L            |          | Ш        | _        | 88       |          |          | _  | L.   |          | Ш        | L              |  |          | <u></u>  | 138      | $\perp$     |                    |          |          |               |           | 丄                  |           | Ш        |
| لر            | 39         | 39       | Ц           | Ц                               | L  | L                                   | $\Box$   |               |              |          |          | L        | 89       |          |          |  | L  |          |          |                |  |          |          | 139      | $_{\perp}$  | $_{\perp}$         | J        | T        | [             |           | $_{\perp}$ T       |           |          |
| _             | ψo         | 40       | T           | П                               |  |                                     |          |               |              |          |          | Г        | 90       |          |          |  |  |          |          |                |  |          |          | 140      | $\Box$      | T                  | ٦        | ٦        | $\neg$        |           | П                  | $\neg$    | П        |
| ×             | 41         | 41       | Π           | П                               |  |                                     |          |               |              |          | П        |          | 91       |          |          |  |  |          |          |                |  | П        | Г        | 141      | $\neg$      | $\exists$          | T        | _        | ヿ             |           | $\neg$             | $\neg$    | П        |
| ا. ز          | lix        | 42       | П           | 1                               | 1  | Г                                   | П        | $\overline{}$ |              | П        | $\dashv$ |          | 92       | П        | _        |  | _  |          |          | $\overline{}$  |  | П        |          | 142      | 7           | 寸                  | 7        | _        | ╛             | $\neg$    | $\dashv$           | $\neg$    | П        |
| (,            | <u>د</u>   | 42<br>43 | 1           | <del>    -</del>                | $\vdash$   | $\vdash$                            | $\vdash$ | <b>-</b>      |              | _        | $\dashv$ |          | 93       | -        | _        | _  | _  | $\vdash$ | $\vdash$ | _              | $\vdash$   | Н        | $\vdash$ | 143      | $\dashv$    | +                  | ┪        | $\dashv$ | $\dashv$      | $\vdash$  | $\dashv$           |           | $\vdash$ |
| V             | uu<br>u    | 44       | H           | ╫                               | +-   |                                     | $\vdash$ | $\vdash$      | $\vdash$     | $\vdash$ | $\dashv$ | -        | 94       | Н        | -        | <del>                                     </del> |  | $\vdash$ | Н        | _              | $\vdash$   | $\vdash$ | -        | 144      | ┪           | $\dashv$           | +        |          | ⇥             | $\dashv$  | $\dashv$           | $\dashv$  | Н        |
| $\mathcal{A}$ |            | 45       | +           | <del>    -</del>                | $\vdash$   | $\vdash$                            | $\vdash$ | H             |              | -        | $\dashv$ | $\vdash$ | 95       | $\vdash$ | -        | -  | -  | -        | $\vdash$ | -              | $\vdash$   | $\vdash$ | $\vdash$ | 145      | $\dashv$    | -+                 | $\dashv$ | $\dashv$ | ┥             | $\dashv$  | $\dashv$           |           | $\vdash$ |
| ١,            |            | 46       | H           | ₩                               | <del> </del>                                     | $\vdash$                            | ⊢        | H             | H            | -        | $\vdash$ | -        | 96       | Н        | _        |  | <del> </del>                                     | <u> </u> | Н        | <u> </u>       |  | $\vdash$ | $\vdash$ | 146      | -           | -+                 | -        |          |               | $\dashv$  | $\dashv$           | ┥         | Н        |
| Ż             |            |          | H           | Н-                              | ↓_   | ⊢                                   | $\vdash$ | Щ             | $\vdash$     | $\vdash$ |          | $\vdash$ | 97       | _        | -        | <b> </b>   | $\vdash$   | Щ        | Ш        |                | <u> </u>   | Н        | -        | 1        |             | $\dashv$           | _        | _        | _             | $\square$ | 4                  | _         | Н        |
| 穴             | <u>4)</u>  | 47       | $\mu$       | 1                               | <del> </del>                                     | <del> </del>                        | $\vdash$ | <u> </u>      | ļ            | <u> </u> | Ш        | <u> </u> |          | Щ        | <u> </u> | <u> </u>   | <u> </u>   | Ш        | Ш        |                | <u> </u>   | Ш        | $\vdash$ | 147      | _           | 4                  | _        | _4       | _             |           | _                  |           | Ш        |
| V             | 16         | \$       | Ц           | Ц                               | ↓_   | Ь.                                  | Ш        | L             |              | L_       | Ш        | $\perp$  | 98       | _        | <u> </u> | <u> </u>   | <u> </u>   | <u> </u> |          |                | $oxed{oxed}$   | Ш        | $\perp$  | 148      | $\perp$     | 4                  | $\perp$  | l        |               |           |                    | ᆜ         | Ш        |
| $ \prec $     |            | 49       |             | Ц                               | L  | 1                                   | Ш        |               | $oxed{oxed}$ | L        | Ш        | $\perp$  | 99       |          |          | L  | <u></u>  | Ш        |          |                | $ldsymbol{le}}}}}}}$ | Щ        |          | 149      |             | $\perp$            |          |          | $\perp$       |           | $oldsymbol{\bot}$  |           |          |
| į             | 51         | 50       | É           | 1                               | <u> </u>   | <u>L</u>                            | لــــا   | لــــا        | L            |          | Ш        | L        | 100      |          | -        | L  | <u>_</u>   | Ш        | Ш        |                | Ш  |          |          | 150      |             | $oldsymbol{\perp}$ | $\Box$   |          |               |           | $\Box$             |           |          |
|               | ;          | a)       | V           |                                 | 1/6  | 1                                   |          | If            | mo           | re       | tha      | 150      | clai     | ms       | or       | 9 8  | actio  | ons      | sta      | ple            | ad   | dition   | ıai s    | neet i   | nere        | •                  |          |          |               |           |                    |           | _        |
| 1             | Ň          | 1        | 'N          | 11.                             | ٦,   | •                                   |          |               |              |          |          |          |          |          |          |  |  |          |          |                |  |          |          |          |             |                    |          |          |               |           |                    |           |          |